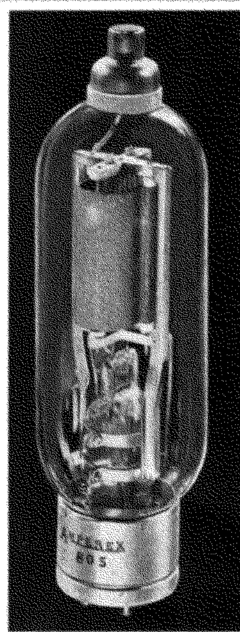
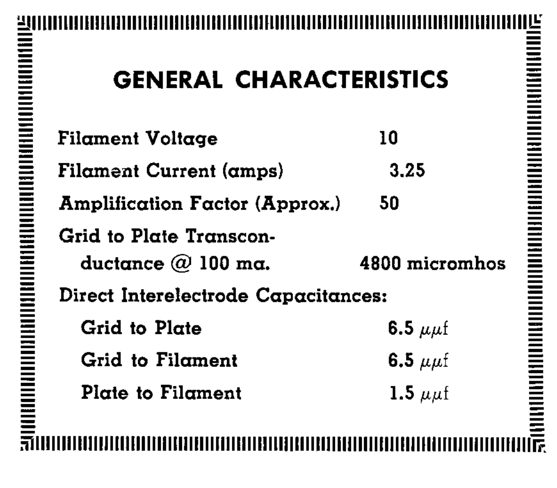
AMPEREX TRANSMITTING TUBE 805



R.F. Power Amplifier, Oscillator,
A.F. Power Amplifier, Modulator

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS



GENERAL CHARACTERISTICS

Filament Voltage	10
Filament Current (amps)	3.25
Amplification Factor (Approx.)	50
Grid to Plate Transconductance @ 100 ma.	4800 micromhos
Direct Interelectrode Capacitances:	
Grid to Plate	6.5 $\mu\mu$f
Grid to Filament	6.5 $\mu\mu$f
Plate to Filament	1.5 $\mu\mu$f

A.F. Power Amplifier and Modulator—Class B

	Maximum Rating per Tube	Typical Operation Two Tubes	
A.C. Filament Voltage	—	10	10
D.C. Plate Voltage	1500	1250	1500
D.C. Grid Voltage	—	0	—16
Load Resistance (ohms per tube)	—	1675	2050
Effective Load Resistance (Plate to Plate) (ohms)	—	6700	8200
Zero Signal Plate Current (ma.)	—	148	84
Peak A.F. Grid to Grid Voltage	—	220	250
Max. Signal D.C. Plate Current (ma.)	210	400	400
Max. Signal Plate Input (watts)	315	500	600
Plate Dissipation (watts)	125	—	—
Max. Signal Driving Power (Approx.) (watts)	—	6.5	7
Max. Signal Plate Power Output (watts)	—	320	400

R.F. Power Amplifier—Class B—Telephony

(Carrier conditions for use with modulation factor of 1.0)

	Maximum Rating per Tube	Typical Operation One Tube	
A.C. Filament Voltage	—	10	10
D.C. Plate Voltage	1500	1250	1500
D.C. Grid Voltage	—	—10	—16
Peak R.F. Grid Voltage	—	70	74
D.C. Plate Current (ma.)	150	120	120
Plate Input (watts)	185	150	180
Plate Dissipation (watts)	125	100	117.5
D.C. Grid Current (Approx.) (ma.)	—	10	10
Driving Power at Peak Modulation (Approx.) (watts)	—	6	7
Plate Power Output (watts)	—	50	62.5
Frequency Limit for Above Operation (mc.)	30	45	30

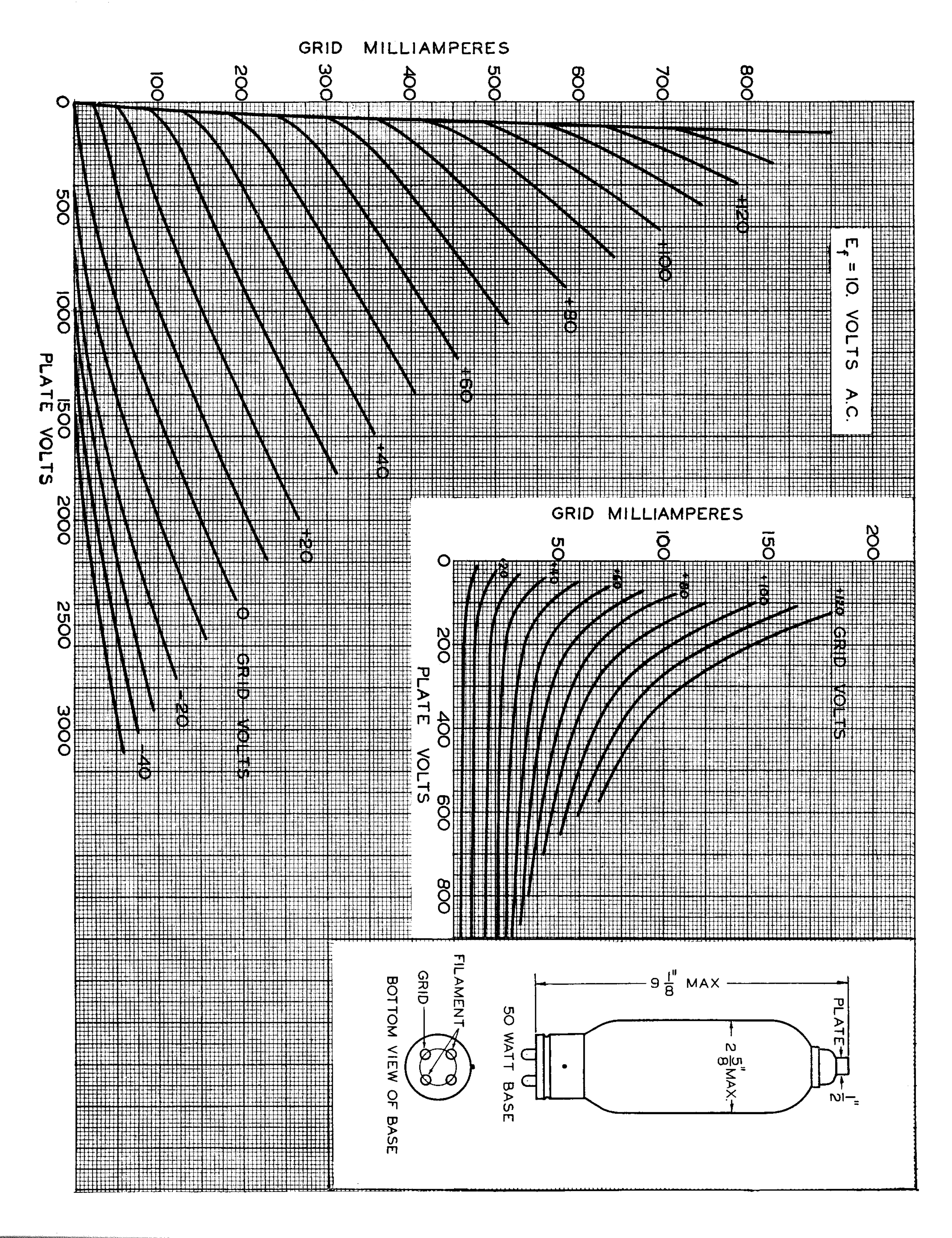
Plate Modulated R.F. Power Amplifier Class C—Telephony

(Carrier conditions for use with modulation factor of 1.0)

	Maximum Rating per Tube	Typical Operation One Tube	
A.C. Filament Voltage	—	10	10
D.C. Plate Voltage	1250	1000	1250
D.C. Grid Voltage	—400	—155	—160
Peak R.F. Grid Voltage	—	290	295
D.C. Plate Current (ma.)	175	160	166
Plate Input (watts)	220	160	208
Plate Dissipation (watts)	85	—	58
D.C. Grid Current (Approx.) (ma.)	70	35	35
Driving Power (Approx.) (watts)	—	9	9
Plate Power Output (watts)	—	110	150
Frequency Limit for Above Operation (mc.)	30	40	30
F.C.C. Broadcast Rating (watts)	125	—	125

R.F. Power Amplifier or Oscillator—Class C Telegraphy

	Maximum Rating per Tube	Typical Operation One Tube	
A.C. Filament Voltage	—	10	10
D.C. Plate Voltage	1500	1250	1500
D.C. Grid Voltage	—400	—100	—105
Peak R.F. Grid Voltage	—	235	240
D.C. Plate Current (ma.)	210	200	200
Plate Input (watts)	315	250	300
Plate Dissipation (watts)	125	80	85
D.C. Grid Current (Approx.) (ma.)	70	25	25
Driving Power (Approx.) (watts)	—	5.5	5.5
Plate Power Output (watts)	—	170	215
Frequency Limit for Above Operation (mc.)	30	40	30


GRID MILLIAMPERES
PLATE VOLTS
GRID VOLTS
E_f = 10. VOLTS A.C.
+120
+100
+80
+60
+40
+20
0
-20
-40
GRID MILLIAMPERES
PLATE VOLTS
GRID VOLTS
9 1/8" MAX
PLATE
2 5/8" MAX.
1/2"
50 WATT BASE
FILAMENT
GRID
BOTTOM VIEW OF BASE